

We claim:

- 5 1. A process for removing  $N_2O$  in nitric acid manufacture, which comprises using catalysts comprising three-dimensional structures coated with catalytically active materials.
2. A process for removing  $N_2O$  in nitric acid manufacture, which comprises utilizing catalysts comprising wire wovens and/or drawn-loop knits coated with catalytically active materials.
- 10 3. The process for removing  $N_2O$  in nitric acid manufacture according to claim 1 or 2 wherein the wire woven and/or drawn-loop knit coated with catalytically active materials forms a catalyst bed from 1 to 150 cm deep.
- 15 4. The process for removing  $N_2O$  in nitric acid manufacture according to any of claims 1, 2 or 3 wherein the temperature at the wire woven and/or drawn-loop knit coated with catalytically active materials is in the range from 500 to 980°C.
- 20 5. The process for removing  $N_2O$  in nitric acid manufacture according to any of claims 1, 2, 3 or 4 wherein the residence time over the wire woven and/or drawn-loop knit coated with catalytically active materials is less than 1 second.
- 25 6. A catalyst for removing  $N_2O$  in nitric acid manufacture, constructed of a wire woven and/or drawn-loop knit coated with catalytically active materials.
- 30 7. A reactor for catalytic oxidation of ammonia to nitrogen oxides which comprises a noble metal catalyst, if appropriate a noble metal recovery network and a heat exchanger in the stated order in the flow direction, characterized in that a wire woven and/or drawn-loop knit coated with catalytically active materials is disposed between the noble metal catalyst/optional noble metal recovery gauze and the heat exchanger.
- 35 8. Apparatus for producing nitric acid from ammonia, comprising in the stated order
  - a) a reactor according to claim 7,
  - b) an absorption unit for absorbing nitrogen oxides in an aqueous medium, and if appropriate
  - c) a reduction unit for selective catalytic reduction of nitrogen oxides.